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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 10/568,996 | 01/30/2007 | Ian Ashdown | PH010501US3 (TIR019) | 3843 |
| 78823 7590 12/05/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS 3 BURLINGTON WOODS DRIVE | | | EXAMINER | |
| | | | VO, TUYET THI | |
| BURLINGTON, MA 01803 | | | ART UNIT | PAPER NUMBER |
| | | | 2821 | |
| | | | | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 12/05/2008 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

KATE.ASHER@PHILIPS.COM mark.beloborodov@philips.com taran.grey@philips.com

| | Application No. | Applicant(s) | | | | |
|--|--|--|--|--|--|--|
| Office Action Occurrence | 10/568,996 | ASHDOWN ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | TUYET VO | 2821 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | L. nely filed the mailing date of this communication. (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on 08 Au | igust 2008. | | | | | |
| ·= · · · · · · · · · · · · · · · · · · | action is non-final. | | | | | |
| <i>,</i> — | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under E | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-7,9-20,22 and 24-26</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) <u>9-17,19,20 and 22</u> is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-7,18 and 24-26</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examine | t. | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ acce | | Examiner. | | | | |
| Applicant may not request that any objection to the o | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | | | | | | |
| 1.☐ Certified copies of the priority documents have been received. | | | | | | |
| | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
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| Attachment(s) 1) X Notice of References Cited (PTO-892) | 1) Intension Cummen | (PTO 413) | | | | |
| 1) Notice of References Cited (P10-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) | 5) 🔲 Notice of Informal P | | | | | |
| Paper No(s)/Mail Date 6) U Other: | | | | | | |

DETAILED ACTION

Amendment filed 08/08/2008 has not been persuasive due to a new ground of rejection provided as follow. The claims 8, 21 and 23 have been canceled while claims 9-17, 19, 20 and 22 have been remained in the withdrawn status. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 18 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Kennedy et al. (US Pat. 6,683,421).

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Regarding claims 1, 18, 24 and 26, Kennedy discloses an integrated lighting module comprising:

- (a) one or more light-emitting elements as a light source (32, 34) mounted on a thermally conductive substrate (39) for generating light energy;
- (b) an optical system (38, 36) optically coupled to the one or more lightemitting elements for manipulating the illumination (col. 4, lines 42-67);
- (c) a feedback system (50) for collecting information representative of operational characteristics of the one or more light-emitting elements, the feedback system includes:
 - (i) one or more optical sensors (38) configured to generate signals representative of the illumination generated by the one or more light-emitting elements (col. 3, lines 20-30), and
 - (ii) one or more thermal sensors (36) configured to generate one or more thermal feedback signals representative of heat generated by the one or more light-emitting elements (col. 7, lines 09-14);
- (d) a thermal management system (23) in thermal contact with the one or more light- emitting elements for conducting heat away from the one or more light-emitting elements (col. 3, lines 45-67); and
- (e) a drive and control system (20, 18) receiving the optical (col. 8, lines 17-22) and thermal feedback (col. 7, lines 09-14) and controlling the one or more light emitting elements based on predetermined control parameters (col. 8, lines

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2- 10) and the optical and thermal feedback signals (col. 8, lines 10-23; col. 3, lines 20-30), wherein the thermal management system includes cold plate, heat sink, liquid coolant to conduct undesired temperature generated within the lighting system away from the drive and control system via a base unit cooling system (23) (col. 3, lines 30- 38 and 57-67 and col. 4, lines 1-21).

Regarding claims 2-7, Kennedy further discloses heat pipes, integrated with thermally conductive substrate (39) (col. 4, lines 26-34), having evaporator end thermally coupled to the light emitting elements (col. 3, lines 45-67 and col. 4, lines 1-22) or a fluid cooling system (col. 3, lines 57-67 and col. 4, lines 1-10).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy as applied to claims 1 and 24 above, and further in view of Hayashi et al. (US Pub. 2004/0051429).

Kennedy discloses substantially the claim invention as noted above except for the thermal management includes one or more thermosyphon devices.

Hayashi discloses a light source device using thermosyphon device as a path or medium for conducting heat between a discharge tube and a reflector.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the thermosyphon device as taught by Hayashi into the Kennedy lighting system in order to conduct heat from light source or from electronic components to another location so as to prevent undesired temperature accumulated in the lighting system or the like. Such implementation is considered as a routine skill in the art.

Citation of pertinent prior art

5. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. See prior arts/references listed on the PTO-892 form attached.

Correspondence

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL.

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyet Vo whose telephone number is 571 272 1830. The examiner can normally be reached on Mon-Wed and Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on 571 272 1662. The fax phone numbers for the organization where this application or proceeding is assigned are 571 273 8300 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 2800.

Information regarding the status of an application or status information for publicing/unpublicing applications may be obtained from the Patent Application Information Retrieval (PAIR) system, see http://pair-direct.uspto.gov. Should you have questions on access to the PAIR system, contact the Electronic Business Center (EBC) at toll free 866-217-9197.

/Tuyet Vo/

Primary Examiner, Art Unit 2821

November 24, 2008